Category #4:

The Guidelines need to address the use of cleaning products with fragrances.

State Response:

OGS agrees that, in many cases, added fragrance ingredients are unnecessary in cleaning products. However, evaluating the potential risks and utility of fragrances in cleaning products is complicated by the chemical complexity of fragrance ingredients, the fact that some of the fragrant ingredients can have both cleaning and fragrant properties and by the possible value, in some cases, of counter-acting a stronger or more objectionable odor from the functional cleaning ingredients in a product.

The current OGS criterion requires that the Material Safety Data Sheets (MSDS) for the product must identify that a fragrance has been added. The individual proprietary ingredients do not need to be disclosed on the MSDS. The OGS product list will include whether a fragrance has been added to the product or not. Another item has been added to Section III of the Guidelines related to the selection of cleaning products with fragrances. OGS recommends that good cleaning management practices include minimizing, to the extent practical, the use of products that leave a scent in the room. One way to accomplish this is to avoid using products that have a fragrance added to create a scent.

OGS wants to reduce the use of respiratory irritants and asthma triggers in cleaning products to the extent feasible. Some chemicals used in fragrance formulations can be irritating to mucous membranes of the eyes and airways when tested individually (e.g., Doty et al. 2004 and references cited therein) and some people with hyper-responsive airways or skin allergies experience asthma-related respiratory symptoms in response to inhalation or eye exposure to fragrances and related chemicals (e.g., Elberling et al., 2005a, b; Milqvist et al., 1999). Some authors have suggested that subjective (i.e., psychological) responses to odors may be responsible for some reported respiratory symptoms associated with fragrance exposure (e.g., Opiekun et al., 2003; Dalton 2003). Other evidence indicates that stimulation of nerves involved in irritation sensations in the eyes or airways is associated with some of the observed increased respiratory symptoms (e.g., Elberling et al., 2006). However, whether fragrances and other odor sources act as asthma triggers due to odor perception or through a direct chemical irritation mechanism would not affect the advisability to limit exposure to the extent practical to avoid asthma exacerbations.

Fragrance formulations are a complex mixture of chemical ingredients, consisting of very few chemicals or as many as several hundred chemicals. About 60% of the production of fragrance ingredients is used in soaps, fabric softeners, cleaners and detergents (Bickers et al., 2003; Ford et al., 2000). The Research Institute for Fragrance Materials (RIFM) gathers, evaluates and distributes to the fragrance industry scientific data on the safety assessment of fragrance raw materials found in consumer and household products, including cleaning products (Bickers et al., 2003). This information is summarized by an independent expert panel and provided to the International Fragrance Association (IFRA) in the form of safety evaluations. IFRA then uses those evaluations to establish standards for fragrance ingredients. Many ingredients are prohibited from used in fragrances because of serious toxicity concerns with their use. The industry testing program and RIFM evaluation focuses on the potential toxic effects of fragrance materials on the skin (including skin irritation and skin allergy) or on other organs and tissues after absorption through the skin or after oral exposure. Direct assessment of inhalation toxicity, including respiratory irritation, and direct assessment of eye irritation do not appear to be part of the standardized safety evaluation.

OGS will support a review and revision of this criterion to see if it can further restrict ingredients likely to trigger adverse respiratory reactions while still allowing for reasonable variety and innovation in the market.

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Frequently Asked Public Comment:

Fragrances: (A) Petroleum-Derived/Petrochemical Blended Fragrances

--The guidelines should not permit added fragrances.

Chemical fragrances which are added to cleaning products to make them smell "clean" are documented triggers for asthma attacks in affected individuals. Asthma has become epidemic in our society, affecting one in seven school-aged children. It is now the leading cause of school absenteeism and pediatric emergency room visits.

Industry has responded to the market demand for fragrance-free products with a plethora of new formulations which do not include added non-functional fragrances. Indeed, Green Seal requires the disclosure (but not elimination) of fragrances as part of their certification process so that purchasers can choose the no-fragrance product.

Against this backdrop of consumer demand and product availability, it seems senseless for OGS to simply ignore the problem and needlessly subject millions of school children and staff to chemical exposures known to be problematic.

We recommend that within Section II "Characteristics of Green Cleaning Products," subparagraph 12

which deals with fragrances be replaced with the following language:

The product shall not contain any added non-functional fragrance.

(Patricia J. Wood, Executive Director, Grassroots Environmental Education, Port Washington, New York)

--The OGS/Green Seal guidelines allow for synthetic fragrances.
(Deirdre Imus, Founder and President, The Deirdre Imus Environmental Center for Pediatric Oncology, Hackensack University Medical Center, The David Joseph Jurist Research Center For Tomorrows Children, Hackensack, NJ 07601)

--With reference to products used daily for general cleaning purposes to which children and staff have the most frequent exposure, we advocate the recommendation (or at least, the delineation) of third party certified, bio-based products without added fragrance
(Janet Foley, Director, Occupational Safety and Health, Civil Service Employees Association, CSEA)

--On behalf of the Fragrance Materials Association of the U.S.(FMA), I am pleased to submit the following comments concerning the Proposed Guidelines and Specifications for the Procurement and Use of Environmentally Sensitive Cleaning and Maintenance Products for All Public and Nonpublic Elementary and Secondary Schools in New York State. FMA is the association of companies that invent and then manufacture mixtures of fragrance ingredients for use in a wide variety of products, including those used for cleaning and maintenance.

FMA supports New York's efforts to protect children and employees by enabling schools to select products that clean effectively while minimizing any adverse impacts on the environment. We are pleased that the guidelines developed for this program allow for the continued use of fragrances in cleaning and maintenance products. Cleaning and maintenance products are more likely to be used, thereby reducing the incidence of illness and disease, if they include a pleasant fragrance. One of the primary goals of our educational institutions is to foster surroundings that encourage educational growth. A clean environment, free from mal-odors, creates an instructional atmosphere that is conducive to learning.

We request that you provide clarification related to fragrances under the "Product Specification Requirements" for "Hand Soap" (GS-41) found in Appendix #4. To be authorized to carry the EcoLogoM and Green Seal® the hand cleaner must meet certain criteria. Criterion (i) requires that the manufacturer:

> Declare any fragrances on the product label and on material safety data sheets. Fragrances shall have been produced or handled following the code of practice of the International Fragrance Association.

We support the requirement to adhere to the International Fragrance Association (IFRA) Code of Practice. FMA is a member of IFRA, and compliance with the IFRA Code of Practice is required by the FMA by-laws. The IFRA Code of Practice represents the most current scientific knowledge on the safe use of fragrance ingredients. We therefore request clarification related to the requirement to declare any fragrance on the label and on the material safety data sheet. Specifically, we request that the criterion require that the manufacturer:

> Declare the presence of any added fragrance ingredients by including the word "fragrance" on the label and on the material safety data sheet.

The requested clarification is intended to establish that this requires only the identification of the presence of an added fragrance compound and not the listing of individual fragrance ingredients.
(Submitted by John H. Cox, Fragrance Materials Association, (jcox@therobertsgroup.net) on behalf of Glenn Roberts, Executive Director, Fragrance Materials Association of The United States, Washington, DC)

--Must not contain petroleum-derived or petrochemical blended fragrances (Apply to Tier I Products).
(Deirdre Imus, Founder and President, The Deirdre Imus Environmental Center for Pediatric Oncology, Hackensack University Medical Center, The David Joseph Jurist Research Center For Tomorrows Children, Hackensack, NJ 07601)

--I am writing urge that the new standards for school cleaning products contain the following recommendations: no non-functional fragrances, no endocrine disrupters, and VOC of 1% or lower, to be reviewed in 2 years as lower VOC products become available on the market. I worked with the Scarsdale Union Free School District to help them develop guidelines for the products used to clean the schools. We have been successful with products that meet the standards I suggest. Fragrances and VOC emissions from cleaning products can affect asthma and allergies in sensitive individuals and endocrine disrupters can cause serious hormone problems, especially in young people. Please think of the children, not the chemical industry, when you adopt your regulations. (Deborah Porder, Scarsdale, NY)

--I would just like to voice my opinions on cleaning supply alternatives in schools. Additional, excess fragrances should be avoided in cleaning supplies because they can lead to asthma attacks. (Alexandra Markiewicz, Vanderbilt University, Lives in Manlius, NY)

--I also believe that prohibiting cleaning supplies with excess fragrances is a wise move, considering the amount of children and teens with asthma and other sensitivities.
(Dorothy Kraebel, Cato, NY)

--No cleaning product contain added "non functional" fragrances. According to the EPA, fragrance are used primarily to mask the odors of other ingredients or improve a product' scent. More than 95% of chemicals used in fragrances are synthetic compounds derived from petroleum, including benzene derivatives, aldehydes and many other known toxics and sensitizers capable of causing cancer, birth defects, central nervous system disorders and allergic reactions. In light of the state's goal to minimize adverse affects on children's health, and from a pollution prevention standpoint, use of added "non-functional" fragrances is to be avoided. (Dr. Daniel Lefkowitz, Yorktown Heights, NY)

--Under Section II: Characteristics of Green Cleaning Products:

- "fragrances (if an ingredient known as a fragrance is in the product for functional purposes, it cannot constitute more than 4% by volume of the undiluted product)." Fragrances are known asthma triggers and are an unnecessary additive.

(Katherine Kelleher of (NYSUT) NYS United Teachers)

--I would like to state for the record that I am opposed to any cleaning agents in our schools that include "fragrance enhancers" (phthalates) and toxic chemicals !
(Richard Peters, 7th Grade Teacher, Lynch Middle School, Amsterdam, NY)

--On the other hand, Green Seal certainly understands and appreciates that children have special health needs and vulnerabilities. There is also a growing and alarming incidence of asthma and other respiratory illnesses among school-age children. Unfortunately, toxicology does not yet have a good basis of endpoints or dose-response relationships for children that can be widely applied. However, it makes sense to take a hard look at some classes of compounds used in cleaning chemicals that may disproportionately have adverse effects and could be avoided without affecting the efficacy of the products. These may include fragrances that are added for sensory effect but which have no actual cleaning function. Green Seal's standards for cleaners and floor-care products (GS-37 and GS-40) require that fragrances that are ingredients meet all health and environmental criteria in the standards and that they be identified on the product's Material Safety Data Sheet. OGS may want to highlight the latter requirement and divide specified products into groups, depending on whether they contain fragrances or are fragrance-free, so that this issue is made transparent for purchasers. Alternatively, OGS could specify that products not contain fragrances at all.

Nevertheless, putting everything in perspective, we could safely say that, if all cleaning and maintenance products currently used in the State's schools were switched over to those that meet the Green Seal standards – with or without fragrances – the State's school children would have a lot healthier

environment. This relates to another critical point, which is that industry has great difficulty meeting a Babel of different bid specifications around the country for the same product category. The value of a single, commonly accepted environmental standard for a product or service category is well illustrated by the acceptance GS-37 has gained in the market as the leadership standard for green cleaners and the support it received from the purchasing coalition led by the Commonwealth of Massachusetts in 2002. Thus, any modification OGS suggests to existing leadership standards should be carefully weighed against the possible weakening of the effort to green industry overall. In the previous example relating to fragrances, it would be better for the State to specify GS-37 and GS-40 and give a preference for those without fragrances, rather than creating a new specification.
(Arthur B. Weissman, Ph.D., President and CEO, Green Seal, Inc., Washington, D.C.)

--For specifications regarding Characteristics Of Green Cleaning Products, (Section II of the proposal), we urge that the following additional criteria be added*:

The product shall be free of added fragrances. If an ingredient known as a fragrance is in the product for functional purposes, it cannot constitute more than 4% by volume of the undiluted product. Fragrances are an asthma trigger and unnecessary.
* See Healthy Schools Network's Guide to Healthier Cleaning and Maintenance: Practices and Policies for Schools, page 5.
(Stephen J. Boese, New York State Director, Healthy Schools Network, American Academy of Pediatrics, Dist. II, American Lung Association of NYC, American Lung Association of NYS, The Association of New York City Education Councils, Campaign for Healthy Children, Citizens Environmental Coalition, Citizens For A Clean Environment, Community Health and Environment Coalition, Environmental Advocates of NY, For a Better Bronx, Grassroots Environmental Education, INFORM, Inc., Learning Disabilities Association of NYS, Learning Disabilities Association WNY, National Resources Defense Council, NEA of New York, New York Committee for Occupational Health and Safety, Toxic Waste Lupus Coalition, WEACT for Environmental Justice, Wellness in the Schools Inc., Jacquelyn Kamin, Community Affairs Director of Opportunity Charter School, Philip J. Landrigan, MD, MSc, Professor and Chairman of Department of Community & Preventive Medicine Mount Sinai School of Medicine, Connecticut Foundation for Environmentally Safe Schools, Health Schools Campaign, Chicago IL, Healthy Children Organizing Project, San Francisco, Ca., and NEA Healthy Schools Caucus)

--CHARACTERISTICS OF GREEN CLEANING PRODUCTS

Recommended Change: We recommend the addition of the following paragraph after the list of criteria (1-13). It is recommended that all ingredients for all cleaning products be listed on the MSDS. It is also recommended that non-fragrant cleaning products be used whenever possible, and non-fragrant cleaning products be required to be used in public and nonpublic schools after 2009.

Justification: Among the many benefits for listing all ingredients on the MSDS is the strong argument in support of the school's ability to answer questions about ingredients contained in the cleaning products the school district uses.

SBGA supports the use of non-fragrant cleaning products wherever possible and further recommends that non-fragrant cleaning products be required after 2009. GS-37 does not currently require products to be fragrant free, therefore in many cases the marketplace has not yet moved in this direction. This proactive language gives the marketplace time to test and develop environmentally preferable products that meet these criteria.

(Signed By: David Brooks (Malone CSD), President & Frederick Koelbel (West Islip UFSD), 1st Vice President, Legislative Committee Chairman)(Submitted By: Kathleen Van De Loo, Executive Director, (NYS SBGA) NYS Association for Superintendents of School Buildings and Grounds, Inc., Albany, NY)

--Many health care facilities. North America wide have scent free policies. My very first comment is why allow cleaning products that have added scents? There is no cleaning benefit to a perfume and we all know

that perfumes add airborne contaminants. The contamination of indoor air from all sources should be reduced to the lowest possible level.

Children and other individuals with chemical hypersensitivity are affected by airborne contaminants at much lower concentrations than the average populations. The Green Seal mode! provides No More Protection from airborne contaminants from cleaning products that what is already legislated in many states. That is just not satisfactory when look at the needs of children. I recommend not allowing the addition of perfumes and reducing the VOC level in general purpose cleaners, bathroom cleaners, floor cleaners and in all products used for daily cleaning. (Michael Rochon, Cogent Environmental Solutions, Caledon, ON, L0N 1C0)